



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/659,398      | 09/11/2003  | Katsuyoshi Suzuki    | 500.43116X00        | 3772             |

24956 7590 11/15/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER

MOAZZAMI, NASSER G

ART UNIT PAPER NUMBER

2187

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/659,398             | SUZUKI ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Nasser G. Moazzami     | 2187                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09/11/2003 & amendment dated 06/14/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/12/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The Examiner requests, in response to this Office action, any documentation known to qualify as prior art under 35 U.S.C. sections 102 or 103 with respect to the invention as defined by the independent and dependent claims. That is, any prior art (including any documentation used to develop the disclosed/claimed subject matter, background art and any products for sale) similar to the claimed invention that could reasonably be used in a 102 or 103 rejection.

This request does not require a search. Support for this request is derived from 37 C.F.R. 1.56 and 1.105, however, it is not intended to interfere with or go beyond that required under 37 C.F.R. 1.56 or 1.105.

In the present application, applicant submitted a number of IDS(s), however in the petition to make special under 37 CFR 1.102, only a limited number of the references have been discussed. Examiner would like to know whether the other references that are not being listed in the petition to make special are relevant to the claim subject matter or not and if not should be deleted from the IDS(s) and new IDS(s) should be provided for consideration.

In response to this Office action, the Examiner requests a discussion of which, if any, presently claimed features correspond to prior art elements in the references cited in the IDS(s). Additionally, the Examiner requests a discussion of which, if any, presently claimed features (independent claims only) correspond to prior art elements in the IDS documentation.

In the event documentation (e.g. newly submitted/previously submitted on an IDS, incorporated by reference or "common knowledge" generally found in the background section but not a publication) is determined to qualify as prior art, a discussion of relevant passages, figs. etc. with respect to the claims must be provided.

The Examiner is looking for specific references to 102/103 prior art that identify independent and dependent claim limitations. Since Applicant is most knowledgeable of the present invention and submitted art, a discussion of the reference(s) with respect to the instant claims is essential.

The Examiner also requests, in response to this Office action, a showing of support for the following:

- 1) Claim language found in the present independent claims, and
- 2) Claim language added to any present claims on amendment and any new claims.

That is, Examiner is asking for Applicant to indicate where in the disclosure there is support for claim language by specifically pointing to page(s) and line no(s). in the specification and/or drawing figure(s).

Additionally, in the event that the disclosure incorporates documents by reference (i.e. prior commonly owned patents, publications or "common knowledge" (generally found in the background section but not a publication)) and where incorporation is relied upon for supporting claim limitations, such supporting documentation and limitations must be identified.

This identification will significantly assist in prosecuting the application in a timely manner to effect compact prosecution. Here again, this request is derived from 37 C.F.R. 1.105. Therefore, examiner has only considered the IDS submitted on 07/12/2005.

Accordingly, In order for the examiner to properly determine patentability over prior art submitted, it is kindly requested that the applicant explain the significance of each reference or highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance. It is desirable to avoid the submission of long list of documents. Examiner request elimination of clearly irrelevant and marginally pertinent cumulative information.

See Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. 359 F. Supp. 948, 175 USPQ 260 (S.D.Fla.1972), aff'd, 479 F.2d 1338, 178 USPQ 577 (5th Cir. 1973), cert. Denied, 414 U.S. 874 (1974). But cf. Molins PLC v. Textron, Inc., 48 F.3d 1172, 33 USPQ2d 1823 (Fed. Cir. 1995).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-26, 29-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 19 and 32 recites the limitation "said Serial Advanced Technology" in lines 8-9 and 8 respectively, which lacks positive antecedent basis. Claims 20-26 are rejected as being dependent rejected claim 19.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19-26 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gates (US Patent No. 6,449,709) in view of Deng (Patent Application Publication No. 2005/0216624).

As for claims 19-26 and 32-35, gates discloses the claimed invention as being admitted by applicant on petition to make special under 37 CFR 1.102, but fails to specifically disclose a plurality of converters coupled to the data line and converting between the serial interface and the SATA interface and a plurality of SATA disk drives

having some of the storage regions and each of the SATA disk drives having the serial interface and one of the converters built-in.

Deng discloses a method for providing data exchange, wherein the storage interface is under the control of the controller to convert the data to be transmitted into a data format adapted to the protocol corresponding to an interface according to the types of the respective interfaces. Deng further discloses that the controller module may support a plurality of interfaces with different standards and conversion and transmittal of the data based on different interface protocol formats (pages 3-4, paragraphs 0042-0043 and 0047).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the current invention was made to include interface as being taught by Deng into Gates's storage system in order to have interface converter to performs data conversion between interfaces to reduce the cost and complication.

### ***Conclusion***

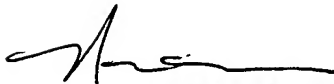
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasser G. Moazzami whose telephone number is (571) 272-4195. The examiner can normally be reached on 7:00AM-5:30PM.

Art Unit: 2187

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**NASSER MOAZZAMI**  
**PRIMARY EXAMINER**

11/09/2005